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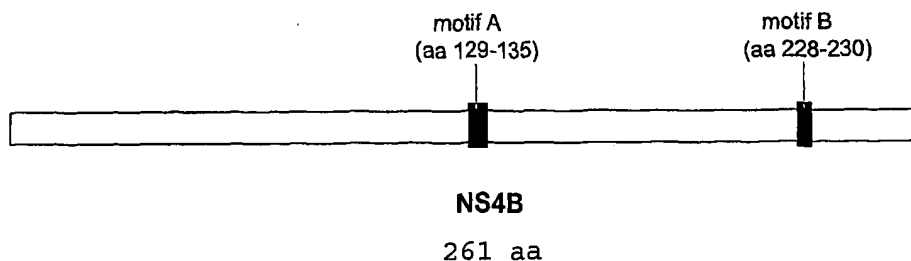
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(54) Title: METHODS AND COMPOSITIONS FOR IDENTIFYING ANTI-HCV AGENTS



Location of motifs A and B of NS4B's NBM

(57) Abstract: The invention provides methods and compositions for identifying agents for treating infection by viruses that encode a nucleotide-binding NS4B protein, or functional equivalent thereof, e.g., hepatitis C virus (HCV) or other members of the family Flaviviridae. In general, the methods involve contacting an NS4B nucleotide binding motif (NBM)-containing polypeptide with a candidate agent, and determining the effect of the candidate agent on nucleotide binding activity, a nucleotide hydrolyzing activity, or a nucleotide-dependent RNA binding activity of the polypeptide. A candidate agent that inhibits NS4B polypeptide binding to a nucleotide is an anti-viral agent, e.g., an anti-HCV agent. The invention also features a polynucleotide encoding a NS4B polypeptide having a modified NBM (e.g., which is impaired in NTP binding). The subject methods and compositions find use in a variety of therapeutic and screening applications.

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